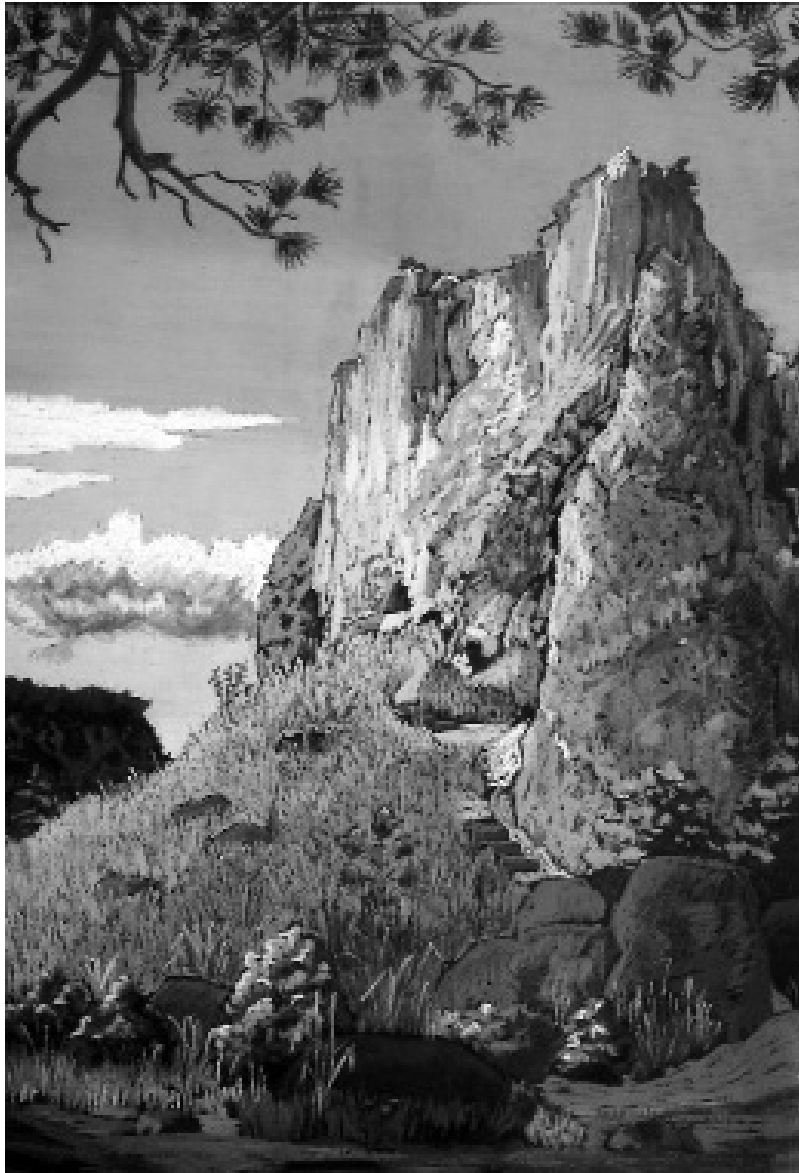


UNIT 3:

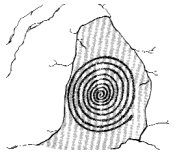
PREPARING FOR A BANDELIER FIELD TRIP



A. Frijoles Canyon
Preparation
Activities
Options

B. Tsankawi
Preparation
Activities
Options

Field Trip To Bandelier



Students learn about the lives of present-day or Ancestral Pueblo people through a field trip to Bandelier or another related site, and participate in a “game show” to heighten their awareness of the need to take care of sites they visit.



FIELD TRIP ACTIVITIES

Location: field trip to Ancestral Pueblo site(s) and/or present-day Pueblo, and work in classroom

Suggested group size: individuals, small groups, whole class

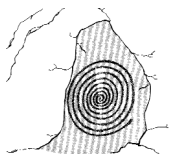
Subjects: history, social studies, archeology, art

Concepts covered: cultural sensitivity, historic preservation, personal responsibility for fragile sites, cultural continuity

Written by: Chris Judson, Bandelier National Monument; Pre-Visit Activity 1 was adapted from the Point Reyes National Seashore Curriculum Guide; and the worksheet, “What I Discovered on Our Ancestral Pueblo Field Trip”, was adapted from the “Save Our History” Educator’s Manual from the History Channel

Last updated: 12/2005

Student outcomes: At the end of this activity, students will have investigated the lives of Ancestral Pueblo and/or present-day Pueblo people through field trip activities and classroom work. Through the use of an activity in the format of a game show, students will have learned proper etiquette for visiting a National Monument or other cultural site, and ways they can contribute to preserving archeological sites and the natural environment.



EDUCATIONAL STANDARDS

New Mexico State Standards

Art

Content Standard 1: Learn and develop the essential skills and technical demands unique to dance, music, theatre/drama, and visual arts.

Visual Arts

Grade K-4

A. Participate in the process of making art to understand the elements of art: line, shape, form, color, and texture.

1. Identify and/or make art using different materials (such as watercolor, tempera, clay, etc.).

Grade 5-8

B. Explore and understand the use of art materials and techniques by culturally diverse artists locally and globally.

Content Standard 2: Use dance, music, theatre/drama, and visual arts to express ideas.

Visual arts

Grade K-4

A. Explore and understand works of art based on self, family, community and the world.

1. Identify similarities and differences in the ideas, customs and art of others
2. Create art that reflects a particular period within a specific culture.

B. Recognize historical and cultural themes, trends, and styles in various works of art.

2. Create art that reflects a particular period within a specific culture.

Language Arts

K-4 Benchmark I-D: Acquire reading strategies

Grade 4

5. Increase vocabulary through reading, listening, and interacting



K-4 Benchmark III-B: Identify and use the types of literature according to their purpose and function

Grade 4

4. Compose fiction, non-fiction, poetry, and drama using self-selected and/or assigned topics and forms.

Social Studies

Strand: History

K-4 Benchmark I-A: Describe how contemporary and historical people and events have influenced New Mexico communities and regions

Grade 4

1. Identify important issues, events, and individuals from New Mexico pre-history to the present.

K-4 Benchmark I-C: World: Students will identify and describe similar historical characteristics of the United States and its neighboring countries.

Grade 4

1. Explain how historical events, people, and culture influence the present-day Canada, Mexico, and the United States (e.g., food, art, shelter, language).

K-4 Benchmark III-E: Describe how economic, political, cultural, and social processes interact to shape patterns of human populations, and their interdependence, cooperation, and conflict.

Grade 4

1. Describe how cultures change.
3. Describe types and patterns of settlements

NATIONAL STANDARDS

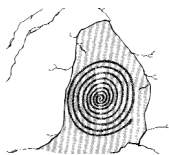
History

Topic 1 Living and Working Together in Families and Communities, now and long ago

Standard 1A, Grades K-4: The student understands family life now and in the recent past; family life in various places long ago

Standard 1B Grades K-4: The student understands the different ways people of diverse racial, religious, and ethnic groups, and of various national origins, have transmitted their beliefs and values

Standard 2 Grades K-4: The history of students' own local community and how communities in North America varied long ago



2A: The student understands the history of his or her local community

Grade K-4: Describe local community life long ago, including jobs, schooling, transportation, communication, religious observances, and recreation (obtain historical data)

Topic 2: The History of Students' Own State or Region

Standard 3 K-4: The people, events, problems, and ideas that created the history of their state

3A: The student understands the history of indigenous peoples who first lived in his or her state or region

Grade K-4: Draw upon data in paintings and artifacts to hypothesize about the culture of the early Hawaiians or native Americans who are known to have lived in the state or region, e.g., the Anasazi of the Southwest, the Makah of the Northwest coast, the Eskimos/Inupiat of Alaska, the Creeks of the Southeast, the Mississippians (Cahokia) or the Mound Builders (Formulate historical questions)

Grade 3-4: Compare and contrast how Native American or Hawaiian life today differs from the life of these same groups over 100 years ago (Compare and contrast differing sets of ideas)

Grade K-4: Examine local architecture and landscape to compare changes in function and appearance over time. (draw upon visual data)

Standard 6A: The student understands folklore and other cultural contributions from various regions of the United States and how they help to form a national heritage

Social Studies

I. Culture

Middle Grades

a. compare similarities and differences in the ways groups, societies, and cultures meet human needs and concerns

c. explain and give examples of how language, literature, the arts, architecture, other artifacts, traditions, beliefs, values, and behaviors contribute to the development and transmission of culture



7. Students conduct research on issues and interests by generating ideas and questions, and by posing problems. They gather, evaluate, and synthesize data from a variety of sources (e.g., print and nonprint texts, artifacts, and people) to communicate their discoveries in ways that suit their purpose and audience.

Health

Standard 5: Knows essential concepts and practices concerning injury prevention and safety

Level II Grades 3-5

1. Knows safety rules and practices to be used in home, school, and community settings.

MATERIALS

For information on present-day Pueblo life:

Books: “Pueblo Girls”, “Pueblo Boy”, “Children of the Clay”
(complete information in “Resources” section below)

For Previsit Activity 1 (for field trip to Bandelier):

Trailguide, “Meet the Ancestral Pueblo People” copied for each student, teacher, and chaperone (note: teachers and chaperones should get the “teacher” version, with answers provided)

Material for covers. If the students will be using clipboards, covers can be made of paper, construction paper, etc; otherwise provide something rigid, like cardboard, at least for the back cover

Markers, pencils, crayons, etc for decorating covers

3-hole punch

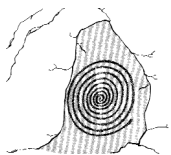
Materials for fastening pages to cover: string and twigs, tape such as book or shipping tape, heavy-duty staples, or metal fasteners

Pencil on a string for each student

Plastic pencil sharpener and several extra pencils for each group leader to carry

Activity 2:

Flipchart sheets and pens

**VOCABULARY**

Ancestral Pueblo people: Pueblo people before the coming of the Spanish in the 1500s; formerly termed Anasazi, a label unacceptable to many present-day Pueblo people.

Pueblo: Spanish word for village, often used to mean a community of Native American people with particular customs, including farming, weaving, and making pottery, and their settlement. There are presently 19 pueblos in New Mexico, plus the Hopis in Arizona and Isleta del Sur outside of El Paso, Texas.

Trailguide: a booklet containing information on things of interest seen along trails, particularly in parks such as Bandelier.

LESSON BACKGROUND: TRIP PREPARATION**Bandelier:**

If you are planning a field trip to Bandelier, Activity 1 below relates to the self-guiding trailguide available in this curriculum guide for students to use at the park. The Main Loop Trail at Bandelier begins at the Visitor Center and leads up through the Ancestral Pueblo dwellings in Frijoles Canyon. There are signs to help people find their way, but none that explain the dwellings and other sites. Instead, there are numbered markers; the guidebook contains information on each point. The park offers a booklet for the general public, but this trailguide is designed especially for students. It includes not only information on the sites, but also illustrations of the life of the people and questions on the things the students are seeing and learning. The student guidebook is written at approximately a 4th grade reading level, but has been used successfully with classes at other levels also.

Other Sites:

If it is not practical to go to Bandelier but you wish to make a field trip to a site related to Ancestral Pueblo people, other possibilities might include:

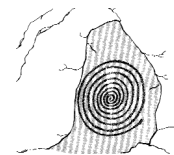
Museums in New Mexico:

Museum of Indian Arts and Culture, Santa Fe, New Mexico
710 Camino Lejo, Santa Fe, NM 87501 505-827-6463 www.miaclab.org

Millicent Rogers Museum, Taos, New Mexico
1504 Millicent Rogers Rd, Taos, NM 87571 505-758-2462
www.millicentrogers.com

San Ildefonso Pueblo Museum, San Ildefonso Pueblo, New Mexico
Rt 5 Box 315A, Santa Fe, NM 87501 505-455-2273

Indian Pueblo Cultural Center, Albuquerque, New Mexico
2401 12th St, Albuquerque, NM 87104 1-800-766-4405 www.indianpueblo.org



Maxwell Museum of Anthropology, Albuquerque, New Mexico
Florence Hawley Ellis Anthropology Museum, Ghost Ranch Conference Center,
Abiquiu, New Mexico HC 77 Box 11, Abiquiu, NM 87510 505-685-4333
www.ghostranch.org

New Mexico State Monuments related to the Ancestral Pueblo people :

- Jemez (Jemez Springs)
- Coronado (Bernalillo) (www.nmmonuments.org)

National Park Service areas pertaining to the Ancestral Pueblo people and related groups: (websites for all National Park areas can be found at: www.nps.gov)

In New Mexico:

Aztec Ruins National Monument (Aztec)

Chaco Culture National Historical Park (Nageezi)

El Morro National Monument Grants)

Gila Cliff Dwellings National Monument (Silver City)

Pecos National Historical Park (Pecos)

Petroglyph National Monument (Albuquerque)

Salinas Pueblos National Monument (Mountainair)

In Arizona:

Canyon de Chelly National Monument (Chinle)

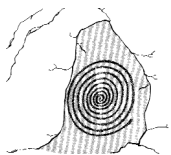
Montezuma's Castle and Well National Monuments (Camp Verde)

Navajo National Monument (Tonalea)

Tonto National Monument (Roosevelt)

Tusayan at Grand Canyon National Park

Tuzigoot National Monument (Camp Verde)



In Colorado:

Hovenweep National Monument (Cortez)

Mesa Verde National Park (Cortez)

Also, outside of New Mexico:

Anasazi Heritage Center

27501 Highway 184, Dolores, Colorado, 81323 www.co.blm.gov/ahc

Museum of Northern Arizona

3101 N Ft. Valley Rd, Flagstaff, AZ 86001 928-774-5213 www.musnaz.org

Southwest Museum

234 Museum Dr, Los Angeles, CA 90065 323-221-2164

www.southwestmuseum.org

Besh-Be-Gowah Archeological Park, Globe, Arizona, 928-425-0320

Edge of the Cedars State Park, Blanding, Utah, 435-678-2238

Homolovi State Park, Winslow, Arizona, homolovi@pr.state.az.us

Lost City in Overton, Nevada, 702-397-2193

Ute Tribal Park, Towaoc, Colorado 1-970-749-1452

Present-day Pueblos:

for Pueblo Governors' Offices phone numbers, look in
www.state.nm.us/oia/triballist.html/

IDEAS FOR PLANNING A GREAT FIELD TRIP

As part of your planning to visit any of these locations, remember to:

- contact the proper office at the institution to make reservations
- find out if they have materials for use by classes before or during visits
- check on practical matters you will need to handle ahead
- find out what rules the group will need to observe

IMPORTANT: Arrange for plenty of active, assertive, interested chaperones and inform them as to what responsibilities you expect them to handle. Be sure they know that they must keep their group of students with them throughout the trip,



do the planned educational activities along the trail with them, and be responsible for their safety and behavior.

If the institution doesn't provide one, consider developing a worksheet or scavenger hunt to focus students' attention. For ideas, look through the questions in the worksheet "What I Discovered on Our Ancestral Pueblo Field Trip", and the lists of potential questions for worksheets or "look-and-leave-it hunts" found at the end of this lesson plan. These questions could be used to make a worksheet to use on the trip or for a review when the students return to the classroom. There are many more question ideas than you will want to use, so customize the worksheet or review to fit your students' experiences and your goals for their field trip. Alternatively or additionally, especially if you are planning a trip to a present-day pueblo, you may want to have the class come up with questions about things they are interested in or curious about.

Whether your class is going to Bandelier or another Ancestral Pueblo site, have them use the newspaper in this curriculum guide, "Pueblo People Past and Present", and the associated activity. Also, have students visit the institution's website for an overview, or obtain brochures and other written/visual materials about the site.

If you possibly can, go to the site on your own before the class visit. If possible, work with site staff to arrange challenging activities during the visit. When you visit the site with your class, make quietly enthusiastic use of exhibits, trails, museum, guidebook, introductory talk or movie, etc, available there.

PRE- AND POST-EVALUATION

Pre-Evaluation:

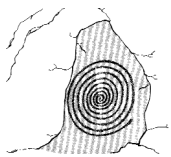
Ask the students if any of them have been to Bandelier (or another site you are planning to visit). If any have, or if they have looked at the location's website or done other research, use a flipchart to make a list of everything the class members know about the site you'll visit, especially including information on the people related to the site and questions they have about it.

Post-Evaluation:

After the field trip and related activities, have the class go over the flipchart list and see if there are things they would add, subtract, or change, and if they have found answers to their questions. Also, use some of the post-visit activities in the lesson plan, "Review and Wrap-Up - Keeping the Traditions Alive."

PROCEDURES—ACTIVITIES TO CHOOSE FROM:

Preparation for visiting Bandelier



Activity 1: Preparing the trailguide. In this curriculum guide, find the student and leader versions of the trailguide, “Meet The Ancestral Pueblo People - Main Loop Trail, Bandelier National Monument” Photocopy as many as you need of each (if possible, do them double-sided and on recycled paper).

- Have students create front and back covers for their trailguides, then bind the covers to the pages. Depending on the materials being used, you could punch the covers and pages and fasten with string or metal fasteners, or staple along the spine if you have a heavy-duty stapler. Covers are essential if students aren’t using clipboards.
- Have students decorate the covers with drawings of things they expect to see on their field trip. Be sure that the first thing put on the front cover is the name of the student, teacher, and school (in case one is left behind at the park, we’ll be able to return it)
- Have each student fasten a string to a sharpened pencil and tie the other end of the string through a hole in the trailguide cover.
- Be sure to take the trailguides for both students and leaders when you go to Bandelier for the field trip. Classes may want to have the students do all the work there, or do some there and some back in class, or answer questions verbally at the park and then do the writing in class. If the latter, pencils and hard covers or clipboards wouldn’t be necessary. If students will be writing at the park, equip each group leader with extra pencils and a small sharpener.

To make full use of the trailguides, you may want to:

- Add extra sheets of blank or lined paper at the back of the trailguide for students to use for other activities while studying the Ancestral Pueblo people.
- After the field trip, save completed trailguides to share with parents at Open House.
- Make a display in the classroom or in a public space in the school. Have the class decide on a title and write captions to explain their field trip and the contents of their trailguides to other students. Consider having students draw pictures of themselves on the field trip as an addition to the display. If you took photos, include them too.

If the class or the school has a newspaper or website, consider sharing materials from the trailguides.

Activity 2: Safety and Stewardship Challenge game

This fun, fast-paced, competitive game-show-type activity is designed to help the students think about how they can have a field trip during which they act safely



and take good care of the resources they're visiting, and also reasons why preservation of the resources is important. The only materials needed are a chalkboard or flipchart. The rules and questions are found at the end of this lesson plan. If you are going to a site other than Bandelier, consider modifying this activity for the location you'll be visiting.

RESOURCES

Newspaper in this curriculum guide: *"Pueblo People Past and Present"*

Packet in this curriculum guide:

"Planning a Field Trip to Bandelier National Monument"

Student Activity, *"Safety and Stewardship Challenge"*
located at the end of this lesson plan

Student worksheet: *"What I Discovered on Our Ancestral Pueblo Field Trip"*
located at end of this lesson plan

Teacher resource sheet of possible worksheet questions,
located at end of this lesson plan

Teacher resource sheet of possible *"Look-and-Leave-It Hunt"* questions,
located at end of this lesson plan

Books:

Keegan, Marcia, *Pueblo Boy, Growing Up in Two Worlds*. Cobblehill Books, Dutton, New York, 1991 (ISBN 0-525-65060-1) ****

Keegan, Marcia, *Pueblo Girls, Growing Up in Two Worlds*. Clear Light Publishers, Santa Fe, NM, 1999 (ISBN 1-57416) ***

Swentzel, Rina, *Children of Clay, A Family of Pueblo Potters*. Lerner Publications, Minneapolis, MN, 1992 (ISBN 0-8225-9627-X) ***

** Available for loan from Bandelier, (505) 672-3861 x 517

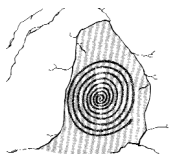
**** Out of print at this writing; limited number available for loan from Bandelier, or may be available through interlibrary loan

Web Resources:

Bandelier website: www.nps.gov/band

Bandelier museum collections website: www.cr.nps.gov/museum/exhibits/band or go to the Bandelier website and click on the "Collections" icon





TEACHER RESOURCES

Possible questions to choose from when making a worksheet for visiting Ancestral Pueblo sites other than Bandelier:

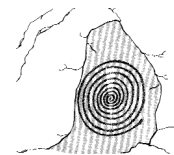
The People

Put yourself in the place of an Ancestral Pueblo person living here

- How would you get food? Water? Clothing? Shelter? As a farmer, how would you get water for your crops?
- Name three ways you would get food, and three foods you would eat.
- What would your favorite food be? What would you have to do to grow, gather, or catch it?
- What would you be afraid of?
- If you found yourself living in those days, name three things you would miss from now, and three things you would enjoy about your life as an Ancestral Pueblo person.
- If you were looking for a new home for your family, and you came to this site, would it look like a good place to move to? Name three good things you would find and three possible problems.
- Do you see any wild plants you could use? Name at least three, and at least one use for each one. Remember not to remove or damage any part of any plant.
- Name at least three differences between the home you live in now and the home you would live in if you were an Ancestral Pueblo person.
- If you met the Spanish conquistadors, what would you think of them?

The Site

- Who owns this site?
- How would you change the site if you could?
- Put yourself in the place of one of the people who care for this site, and:
- Tell what rules there would have to be for groups coming to visit.
- Tell what you could do to prevent litter, prevent people from going off the trail, and help students learn about the ancient people who lived here.



- Tell how you would explain: why pets are not allowed on trails; why people can't pick any flowers, collect any rocks, or take home any wildlife.

Draw

- Imagine how things looked at this site long ago. Then draw:
The kind of house you would live in
A picture of yourself as an Ancestral Pueblo person, doing something you would have been doing on a day like today. Include lots of details.
- Look very closely at something near you (a plant, an insect - something natural and interesting) and draw it, or part of it, with lots of details.

Wildlife

Remember that at most parks, all native creatures are protected by law. Enjoy them but let them live undisturbed.

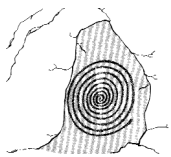
- Name at least four kinds of animals with four legs, four kinds with six legs, two kinds with two legs, and one kind with eight legs that would live here.
- What would these creatures eat? Where would they have their homes?
- Figure out at least three reasons why people shouldn't feed the wildlife.
- If you were an animal that lives here, how would it hurt you if someone left litter on the ground?
- Pick an animal that lives here, and tell the story of a day and a night, or a winter, spring, summer, and fall, in its life.

A food chain tells how animals and other things are connected by the energy they get from each other. Usually they get this energy by eating each other. A simple food chain might be: GRASS - RABBIT - HAWK

- Think of at least three other food chains that would happen here. See how long you can make your chains. Be careful to be sure that they make sense.
- Can you think of any living thing in the world that isn't part of at least one food chain?
- Can you make a chain that doesn't end? (Hint: scavengers and decomposers.)

TAKE A MINUTE

- What do you smell in the air? How many different fragrances do you notice?
- What do you hear, besides people? What different sounds can you recognize? Can you see any of the birds you hear singing?



FIELD TRIP ACTIVITIES

- How many different shades of green can you notice? How many shades of brown? Is all of the sky the same color of blue? Are all the clouds the same color?

CONCLUDING

- What did you see today that was new to you?
- Name two things you did to help keep the site a beautiful place to visit. Name three or more things you do at home to keep the earth a good place for all creatures (including humans!) to live.
- What was your favorite part of the field trip (not counting lunch!)?
- What did you find out today that you would like to learn more about?
- Name at least three new words that you learned today about the Ancestral Pueblo people, and tell what they mean; or name three ideas that you have talked about in class that you saw for real today.

TEACHER RESOURCES

Possible questions to choose from when making a “LOOK-AND-LEAVE-IT HUNT” for visiting Ancestral Pueblo sites other than Bandelier:

In the Museum:

- An old pot that is shaped like a modern one
- A photograph showing people doing something the same way the Ancestral Pueblo people would have done it in the old days.
- Something in an old home that is like something in your home
- Two ways the people kept warm
- Three things they used to make meals
- Two farming tools and one hunting tool
- A tool made of obsidian

On the trail:

Look for something that the Ancestral Pueblo people could have used for:

- Making “bricks” for their houses
- Making roof beams for their houses



Think of an animal around here that:

- The people could have used for food
- The people could have used for skins for clothes
- The people could have used for bones for tools.
- Sleeps all through the winter
- Is out and running around all through the winter

Look for something that:

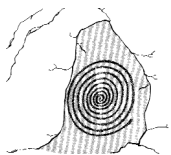
- Is older than you
- Is younger than you
- Is the largest non-living thing that you can find here
- Every creature needs to survive
- Doesn't belong here
- Is extra-special that you want to tell the group about

Think about it:

- If you had the chance to spend a year living as an Ancestral Pueblo person in the old days, name three things you would miss from nowadays
- Name three things you would like better in the old days
- What would be your favorite things to do in those days?

Look around and see if you see: (don't pick anything!)

- A plant that is evergreen
- A tree that has short needles in groups of two
- An evergreen that doesn't have needles or leaves
- Something you have never seen before
- Two pine cones that look just alike
- Good habitats for three different kinds of animals

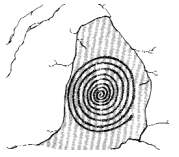


STUDENT WORKSHEET

WHAT I DISCOVERED ON OUR ANCESTRAL PUEBLO FIELD TRIP

1. Name of the Ancestral Pueblo site that I visited:
2. The Ancestral Pueblo people lived there _____ years ago.
3. I saw buildings that were used for: (at least two)
4. I learned that in some ways the life of the Ancestral Pueblo people was different than Pueblo people today. In other ways it was the same.
 - * Some of the differences are: (examples: no electricity, no TV, hunting for food; tell at least two more)
 - * Some things that are the same: (at least two)

5. I saw buildings they used in those days.
This is what one of the buildings looks like:
 - 1) now



2) the way it would have looked then.

It was used for :

6. Some things I learned that I thought were interesting: (at least two)

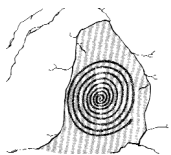
7. Some things I learned that surprised me:

8. Something I still wonder about the Ancestral Pueblo people:

9. I believe it is important to take care of places where people lived long ago because:

10. These are some things I can do to preserve places where Ancestral Pueblo people used to live: (at least two)

11. Here is a drawing of me doing something I would have enjoyed doing if I lived in those days:



STUDENT ACTIVITY

Safety and Stewardship Challenge

Divide the class into teams. If the class can work as large teams, divide the class into two teams. Each team will need a spokesperson and a team name. Answers will come from the entire group. Spokespersons can change throughout the game.

If the class is likely to get too boisterous, students can still be divided into teams, but answers will come from individuals on each team. One person from each team will be assigned a number. Team A and Team B will each have a #1, #2, etc. Randomly choose a number from hat. The student with that specific number from each team will be responsible for answering the question. Random choice of numbers will help students pay attention if they aren't quite sure when their turn will occur.

Draw the challenge grid and scorecard on blackboard. There are four categories with questions of varying value. As a finale, there is a final challenge question. Draw this grid on the board:

Safety and Stewardship Challenge

Category #1 Take Care of Yourself	Category #2 Minimize Your Impact	Category #3 Trail Etiquette	Category #4 National Parks
1 point	1 point	1 point	1 point
2 points	2 points	2 points	2 points
3 points	3 points	3 points	3 points
4 points	4 points	4 points	4 points

Choose game show hosts

Teacher can be responsible for asking all of the questions

- Four students will become "Challenge Hosts". Each student receives questions for a specific category and will ask appropriate questions according to point value.
- Host should record each team's points where everyone can see them, such as on the grid.

Rules of the game

- A coin flip will determine which team goes first.



- The game will end when a predetermined time runs out or when all questions have been answered.
- Team will decide which category and value of question will be asked.
- Spokespersons or individuals will poise themselves on either side of the bell with one hand behind their backs.
- After the question is asked, the first team to have an answer will ring the bell and respond. If it is correct, the team receives the full point value.
- If it is incorrect, the other team gets a chance. If the second team also gets it wrong, the first team can try again for one less point.
- When brainstorming answers, students should whisper, or the other team may hear their answer.
- When all of the categories are complete (or five minutes before a predetermined “game over” time) class will go into “Final Challenge”. Each team decides on amount of wager, listens to question and writes down answer on a sheet of paper. Each team reveals answer.
- At the end of the game, the team with the most point “wins”, but everyone wins if your visit to Bandelier National monument is safe for themselves and the resources.

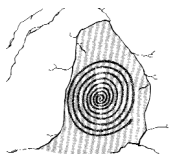
Challenge Questions:

Category 1: Take Care of Yourself

1 point

Always remember to stay with your group because:

- A. you don't want your adult leader to get lost
- B. you don't want to get lost
- C. you'll have more fun and learn more if you're with your group
- D. nobody wants to spend the whole day looking for you instead of enjoying walking on the trail and learning about the Ancestral Pueblo people
- E. All of the above



FIELD TRIP ACTIVITIES

2 points

Two of these make sense:

- A. Wear sunscreen, sunglasses, and a hat even if it is cloudy.
- B. Carry earplugs in case you don't like to hear birds singing
- C. Have at least one extra pencil.

3 points

If you see a squirrel that looks like it wants you to feed it, you should:

- A. Pick it up and hug it, to be sure it will bite you and give you fleas
- B. Climb up in a tree to find nuts for it, since squirrels don't know how to find their own food
- C. Enjoy looking at it, but remember that people food is bad for it and if you get too close it might bite you or its fleas might jump onto you.

4 points

The best way to dress for your field trip is:

- A. Don't look out the window that morning before you come; who cares if it is snowing and you are wearing shorts?
- B. You want to look good for your field trip, so be sure to wear uncomfortable shoes and fancy clothes that you can't get dirty.
- C. Dress in layers so if it gets hotter you can take off a sweater, or if it gets colder you can put on a jacket, and wear shoes that will feel good even after you walk a mile or two.

Category #2: Minimize Your Impact

1 point

When visiting Bandelier, you should stay on the trail at all times because:

- A. You can walk on the trail all day long and not damage anything
- B. If you climb or stand on the walls of the archeological sites, a wall could fall down and mash you flat as a pancake. And you'd be embarrassed, too.
- C. If you climb on the cliffs, the rock is so soft it could break, you could fall and get hurt, and you'd miss the rest of the field trip
- D. If you walk off the trail, you might step on a little plant that is just starting to grow, and then the deer might not have enough to eat
- E. All of the above



2 points

It's okay to take home just one rock, or just one flower, or just one leaf from Bandelier:

- A. No it isn't. Over 300,000 people visit Bandelier every year, and if everyone took even one, there'd be none left
- B. No it isn't. Every rock, flower, and leaf is important to the bugs, birds, and other things that live here.
- C. It's only OK if you take it home in your memory or your camera.
- D. All of the above

3 points

It's okay to leave litter or garbage in Bandelier:

- A. After all, it's only fair, because the deer and squirrels leave candy wrappers and soda cans in your house all the time.
- B. As long as you put it out in the open where somebody else can pick it up, since you're too lazy to put it in the trashcan.
- C. Only if you put it in a recycle can or a trash can

4 points

Along the trail you will see petroglyphs, drawings that the Ancestral Pueblo people carved into the cliffs. Which one is true?

- A. If it was OK for the Ancestral Pueblo people to carve pictures on the cliffs, then it's OK for me to carve a drawing or my name on the cliffs or rocks.
- B. I shouldn't carve on the cliffs or rocks, but it is OK for me to leave graffiti on the buildings or restrooms.
- C. The only thing I should write on is my trailguide/workbook. Then I can be proud of the things I write.
- D. It is only OK to deface other people's property if you spell everything right.

Category #3: Trail Etiquette

1 point

While you are in the park, you should talk quietly for all these reasons except:

- A. The canyon walls are stone and loud noises echo, and other visitors came here because they wanted to hear you yelling



FIELD TRIP ACTIVITIES

- B. If you only talk quietly, you have a better chance to see deer and other wildlife
- C. If you talk quietly, you can hear all the birds singing, the sound of the stream, and the wind in the trees.
- D. If you talk quietly, other people can also hear the birds singing, the sound of the stream, and the wind in the trees.

2 points

When you are going up the trail, you should walk, not run, because:

- A. The trail is asphalt, and you can really skin your knees and elbows (and maybe your nose, too) if you fall
- B. If you run you might accidentally step on a stinkbug - and boy, do they stink!
- C. If you walk, you will see more neat things like birds and lizards
- D. All of the above

3 points

When you are coming down one of the ladders, you should always face the ladder because:

- A. If you go down with your back to the ladder, you have a better chance of stepping on the person on the ladder below you.
- B. If you go down with your back to the ladder, when you slip you will enjoy falling all the way to the bottom.
- C. It's much safer to face the ladder because your hands and feet have a better grip on the rungs

4 points

If there are people ahead of you on the trail and they are walking more slowly than your group, you should:

- A. Flash your headlights to let them know that you want to pass
- B. Run right by them; if possible, run into them and step on their feet on the way by
- C. Make rude remarks about them
- D. Wait until there is a wide space in the trail and ask courteously if they will let your group pass.

**5 points**

If there are other people coming down the trail as you are going up, you should:

- A. Get your group into single file so the other people can go by; then they will know that students from your school are really great people
- B. Refuse to move over, and make them break the rules and damage the park by going off the trail
- C. Break the rules and damage the park by going off the trail yourself.

Category #4 National Parks and Monuments**1 point**

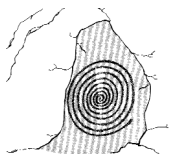
The National Park Service is in charge of the National Parks System. There are lots of names for the different kinds of parks, like National Monuments, National Historic Sites, National Seashores, and National Battlefields. Which of the following is not part of the National Park Service?

- A. Bandelier National Monument
- B. Yellowstone National Park
- C. Disneyland
- D. Carlsbad Caverns National Park

2 points

I should treat every National Park and Monument carefully and respectfully because:

- A. It belongs to everyone, including me, and I'm always careful with special things that belong to me
- B. Wild plants, animals, and birds need a good environment to live in, and I enjoy seeing them healthy and strong
- C. Someday I'd like to bring my grandchildren here and have them enjoy it as much as I have
- D. There's only one Bandelier, and the Ancestral Pueblo people can't come back and make their homes again if someone damages them.
- E. All of the above



3 points

Which of the following is something that rangers don't do:

- A. Protect the plants and animals
- B. Make mean rules so visitors can't enjoy being at the park
- C. Rescue people who are lost and give first aid to people who are hurt
- D. Give people lots of good information about the park

4 points

In order to take care of the parks, the National Park Service has people who do many different kinds of jobs. If you wanted to work in the National Parks when you grow up, you could do any of these jobs except:

- A. Plumber
- B. Computer specialist
- C. Mountain climber
- D. Thief

Final Challenge

Each group decides how many of their points to wager that they will get this question right.

Stewardship means to care for things or places that are special. National Parks need every visitor to be a good steward and take good care of them. Name two ways that Bandelier is special, and two ways that you can be a good steward when you visit there.

Possible Answers:

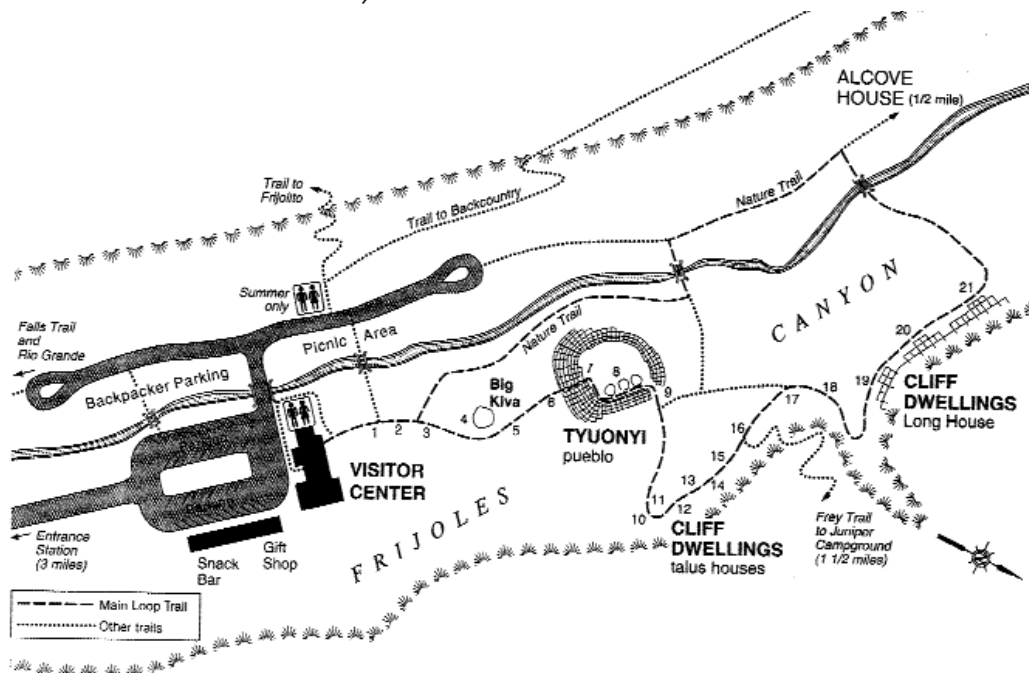
It is special because: Ancestral Pueblo people lived here, there are archeological sites, there are cliff dwellings, animals live here, birds live here, it is made of volcanic rock, there are trees and/or flowers, it is beautiful, it is in the mountains, etc.

I can be a good steward by: staying on the trail, not feeding the animals, not picking the flowers, not collecting things, not littering, being courteous to other visitors, not making graffiti, talking quietly, etc)



Meet the Ancestral Pueblo People

MAIN LOOP TRAIL, BANDELIER NATIONAL MONUMENT



FIRST STOP: Visitor Center Back Porch

INTRODUCTION (if you did not have an orientation done by a ranger)

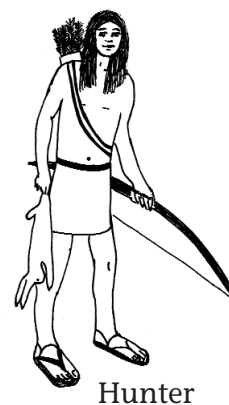
Get ready to go back in time 500 years.

It was a time when Indians were the only people anywhere in North or South America. At that time a group of people lived here in Frijoles Canyon. They were the ancestors of Pueblo Indians. In those days they had not yet seen anyone from Europe. They did not have metal, wheels, or horses. For a long time archeologists called them the Anasazi. Pueblo people today feel that name is offensive and disrespectful. So now we usually say Ancestral Pueblo instead.

Remember that Bandelier National Monument is a beautiful, fragile place. It belongs to everyone, including YOU! Thousands of people visit Bandelier every year. So it is very important for everyone to remember the rules. You need to take good care of the park and yourself. Be courteous to other visitors, too.

Don't forget:

- * **stay on the trail**
 - * **stay with your leader**
 - * **talk quietly**
 - * **climb only on ladders**
 - * **leave the flowers for the wildlife**
 - * **do not litter**
 - * **don't drink from the creek**
 - * **do not feed or bother the animals**
- AND**
- * **don't take rocks, pine cones, lizards or anything else home with you (except memories and photographs!)**



Hunter



Making Pottery



ON THE TRAIL

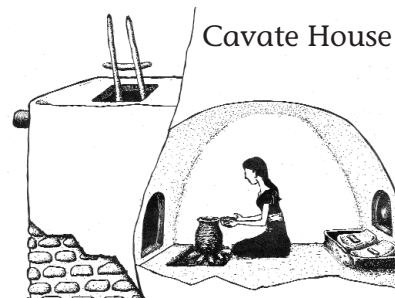
STAKE 1: LIVING IN THE CANYON

Here you are, in Frijoles (Free-HOH-lays) Canyon.

For hundreds of years it was home to a group of Ancestral Pueblo people. The cliffs around you are made of soft rock called tuff. That is volcanic ash. It erupted from a gigantic volcano in the Jemez Mountains about a million years ago.

The holes were made by erosion from snow, rain, and wind.

Ancestral Pueblo people used the loose rocks along the base of the cliffs. They shaped them into bricks to build their homes. They also carved small cave rooms into the soft rock of the cliffs. They are called cavates (cave-EIGHTS). The people used the cavates for back rooms in their homes. You can tell which holes are really cavates. They usually have clay plaster on the walls. They have black soot on the ceiling from smoky fires. They have flat floors and smooth walls. Farther down the trail you will see many of these cavates. You will also see a house that has been rebuilt.



Cavate House

As you walk along, imagine what it would be like to live here in those days. They were people just like us. They had sisters, brothers, and friends. They needed all the same things we need: food, clothes, homes, and even music.

What does a cavate have that natural holes in the cliff don't have?

Clay plaster on the walls and black soot on the ceiling

What things would you and your friends like to do in those days?

Hunt, play games, play with the dogs, help your relatives, build houses, explore, make bows and arrows, etc

STAKE 2: GETTING FOOD

Imagine you were living here 500 years ago. There were houses along the base of the cliffs and in the bottom of the canyon. You would see gardens of corn, beans, and squash. Some were down here. Some were on top of the mesas. The only tame animals were dogs and turkeys. There weren't any horses, cows, sheep, chickens, or goats. If this was a sunny spring day, you probably would be helping in the garden. You could pull weeds. You could bring water from the creek to help your crops grow.

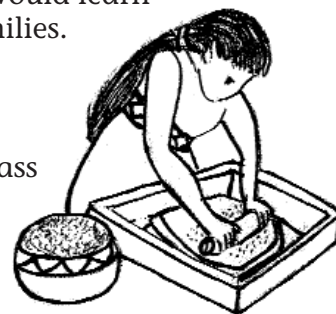


Corn and squash

If this was a day in the fall, you would help with harvesting the crops. Then you would put them on the roof of your house to dry. You would store them carefully. That way you and your family would have food to eat all through the long, cold winter. Girls would grind corn into cornmeal to make nourishing meals. Boys would learn to be good hunters. They wanted to bring home meat for their families. The men taught them to be respectful to the animals they hunted. Everyone helped out and worked together.

Could they store their food in a refrigerator? How about cans or glass jars? **No refrigerators, no metal for cans, no glass for jars**

What could you do to keep from running out of food in the winter? **Dry the crops and store them carefully**



Grinding Corn

**STAKE 3: USING NATIVE PLANTS**

The canyon provided many things the people needed. There were stones for buildings and tools. There were areas to farm, a stream for water, and many kinds of native plants. Their ancestors had lived in the nearby canyons, mountains, and mesas for thousands of years. They had learned which plants they could use for food, medicines, dyes, and tools. They knew which ones were poisonous. They knew where to look and what time of year they would be growing.

Look around you. The tall trees with long needles and orange bark are *Ponderosa pines*. Their trunks made good roof beams.

Short bushy-looking trees are *junipers*. Their berries don't taste very good. But they could be used for food in dry years when other things didn't grow. Juniper wood was strong, so it was good for making tools.

Short pine trees with short needles are *pinyons*. Pinyon nuts are tasty and very nutritious. The wood is good for firewood.



Ponderosa Pine

Juniper Branch

**STAKE 4: BIG KIVA****(Remember to stay on the paved trail)**

This is a very special room called a kiva (KEE-vah). It was a combination of church, school, and meeting room. Sometimes there were ceremonies. In the winter there was storytelling. Many Pueblo people today still use kivas. To get inside you walked across the flat mud roof and went down a wooden ladder. There could be a fire for light and heat. Fresh air came in through the ventilator shaft that looks like a chimney.

The rectangular holes in the floor might have been used as drums. Or maybe they were for storage. Kivas are used by both men and women. If you were a boy in those days, you would spend a lot of time here. You would learn from your father, grandfather, uncles, and other men of the village. Girls mostly learned at home from their mothers, grandmothers, and aunts. There were so many skills and so much knowledge for the kids to learn! But they didn't have an alphabet. They didn't have books to use in school. If you wanted to learn something, you had to get someone to teach you. There were no grades. If you didn't pay attention very well, maybe you wouldn't know how to make warm clothes for the winter. Or maybe your garden wouldn't grow enough food for your family.

Father and Son
Planting Corn

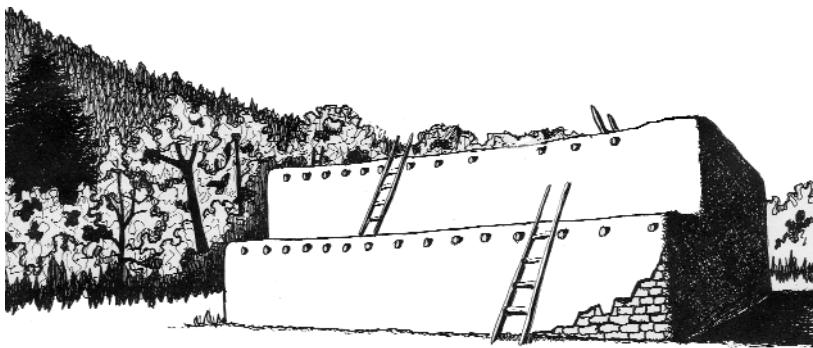
Name at least four skills you would want to learn to survive here in those days.

farming, tool-making, hunting, knowing wild plants, cooking, food storage, raising children, healing sickness, tanning hides, making baskets, making sandals, building houses, weaving, fire making, pottery-making, making moccasins, knowing the old ways, making caviars, drying meat, recognizing poisonous plants, etc



STAKE 5: AN UNEXCAVATED BUILDING

Five hundred years ago, a building was standing here. The Ancestral Pueblo people moved away. Nobody was around to take care of it. The roof beams rotted and fell in. The rain and wind took away the mud mortar that held the building stones together. After awhile the walls fell down. Dirt blew in, and plants grew on top. Now you see a brush-covered mound, but it used to look like this:



The building that was at Stake 5

Archaeologists are scientists who study how people lived in the past. They can learn a lot by studying buildings like this. Sometimes they clear away the dirt to study the rooms and the things inside. That is called an

excavation. Archeologists do excavations very carefully. They don't want to miss even a tiny bit of information about the people's lives. This means that everyone must leave archeological sites undisturbed until scientists can study them. They were homes of ancestors of present-day Pueblo people. Leaving them undisturbed is a sign of respect to the Pueblos now and long ago.

There is a lot more to Bandelier National Monument than just Frijoles Canyon. In the park's 50 square miles there are at least 3000 archeological sites. Up ahead you will see a few that have been excavated. But the others look like this.

What are two things archeologists could learn about you if they studied your house?

STAKE 6: TYUONYI

This big village is named Tyuonyi (chew-OHN-yee). It has already been excavated. These are the real walls that the Ancestral Pueblo people built. When they were living here, all the walls were tall. The rooms had roofs. Some houses had two stories. Each family would build as many rooms as they needed for sleeping, cooking, and storage. The very small rooms might be used for storing food. Many families would live in the village. Others had their homes up along the cliffs. Some archeologists think that 300 or 400 people might have lived in Frijoles Canyon.

Now the roofs are gone. Rain can wash the mud away. The walls can fall down. The National Park Service has to work hard to keep the walls up. To present-day Pueblo people, this is a very special place. Their ancestors lived here. Please remember to show your respect for the Pueblo people and their ancestors. Stay on the trail. Don't lean or sit on the walls. You wouldn't want to do anything that might cause damage.

So many families lived so close together. Everybody really had to get along.

Think of two rules to keep you and your neighbors from arguing too much.

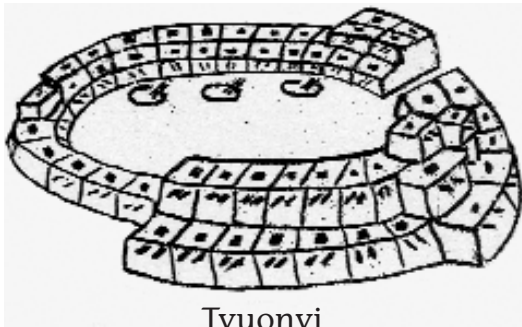
Not too much noise, stay out of other peoples' business, keep your house neat, share, don't bother other people's stuff, help each other, etc.

**STAKE 7: TYUONYI PLAZA**

(You're not off the trail or sitting on the walls, right?) The big open space in the middle of the village is the plaza. It was an area for work, play, and ceremonial dances for everyone. Here men might be making arrows or repairing tools. Women might be grinding corn or cooking. You and your friends could play with the dogs or babysit your little brothers and sisters. You could help with the chores. The big color drawing in the park brochure shows what it might have looked like in those days. Tyuonyi is very unusual. Most villages were shaped like a rectangle or square and built on mesa tops.

What would be your favorite thing about living in a village like this?

Would there be anything you wouldn't like?



Tyuonyi

STAKE 8: THREE KIVAS

There are many kivas in Frijoles Canyon. Most of them are small like the excavated one in the plaza. Can you see two round low spots in the plaza? They are kivas that haven't been dug up yet.

Archaeologists wonder why the Big Kiva (that you saw at Stake 4) was so big. Maybe it was for special meetings or ceremonies with more people than could fit into a regular kiva.

STAKE 9: PEOPLE ALL AROUND

From here you can see the big village and all the homes along the cliffs. Imagine being an eagle in the old days. Imagine flying over this village. Then fly east, west, and south of here. You would see other big villages every few miles. There would be lots of small buildings and gardens in between. North of here you would fly over the top of the volcano. Nobody lived up there because it is the top of a mountain. It is too cold and snowy in the winter.

The people here and the ones to the west and south spoke a language called Keres (CARE-aze). People to the east spoke a different language, Tewa (TAY-wah). But they probably did a lot of visiting and trading from village to village. Some Pueblo people in New Mexico still speak those languages today. Others speak Tiwa (TEE-wah), Towa (TOE-wah), or Zuni (ZOO-nee).



Where would you like to live—on a canyon bottom ? along the base of the cliffs ? on a mesa top? Why?

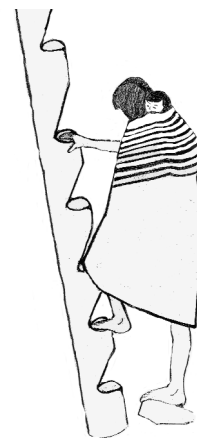
**STAKE 10: CAVE AND TUFF**

There is a natural cave high in the cliff above you. Do you remember how to tell whether people used this cave? (the shape, plaster, and soot on the ceiling) Did they? There are hand and toe holds on the cliff. The people used them for climbing up to the cave. They were worn deep into the rock by many years of use.

Here you are right next to the tuff. It is rock that came from the volcano. Even without touching it, you can tell that it is soft. It is not black and hard like the kind of lava called basalt (buh-SALT). That lava is found around many other volcanoes. You can see why there are rules that everyone must walk just on the trail. No one should climb around on the rocks or cliffs. You could do a lot of damage. Or you could get hurt on such crumbly stuff. You can see how the people could carve out a cavate using stone tools. It would be hard, dusty work to make a cavate and build a house. But then you would have a warm, cozy place to live with your family.

STAKE 11: ENTER A CAVATE

You're welcome to use the ladder to enter this cavate. Remember to only go into caves that have ladders. There used to be a house in front of this cavate. To make the roof strong, the people put the ends of the roof beams into holes in the cliff. We call roof beams vigas (VEE-gahs). Here you can see a line of holes for vigas. Some houses had a second story. Then the roof of the first story was the floor for the second story.



Ancestral Pueblo woman and child using a one-log ladder

While you are waiting to go up the ladder, look at Tyuonyi. People who lived there were close to the stream and the gardens. If you lived up here by the cliffs you had a different advantage. In winter the sun shines warmly on this south-facing canyon wall. The snow melts off quickly. In the afternoon you could sit in the sun on your house roof. You could enjoy the warmth before the long cold dark winter night.

Make a drawing of all the rooms you think this building had. Put labels showing what you think each room was used for. If it was your house, what would you use the cavate for?

STAKE 12: RECONSTRUCTED HOME

This house was rebuilt by the Park Service. All the houses along the cliffs looked like this, except in real houses the only door was in the roof. The houses in Tyuonyi looked a lot like this too. But they didn't have the cliff for a back wall. Cavates were seldom used by themselves. They were almost always a back room for a house.

The thick stone walls provided good insulation. On a hot summer day your house would be cool. On a cold winter day you could heat it with just a small fire. Imagine going out on a snowy day. You would use a stone ax to cut firewood. Remember, they didn't have any metal. Then you would carry the wood home on your back. Remember, they didn't have horses or wheels.

Would you like to have a house that was small but easy to heat? Or a bigger one that took a lot more firewood? Why?



Pictographs in cavate at Stake 13



STAKE 13: SNAKE KIVA

This cavate was a kiva. The people coated the walls with clay plaster. Then they painted designs on the plaster. Painted designs are called pictographs. On the back wall there is a wide, long, wavy black line. Many people think it is a drawing of a feathered serpent. If you look closely, you will notice the head on the left end. It has its mouth open. There is a straight line, a feather, sticking up. To the right, where the back bumps up, is another feather. This one curves toward the tail. Some Pueblo people today call this serpent Awanyu (uh-WAHN-yew). They say it is a spirit of water, like rain and streams. Water has always been very important to people trying to survive in New Mexico.

Look for a red-brown picture near the serpent's tail. Can you see a face with black hair? Can you see three feathers on the back of the head? They are red, white, and yellow.

STAKE 14: ANOTHER LADDER

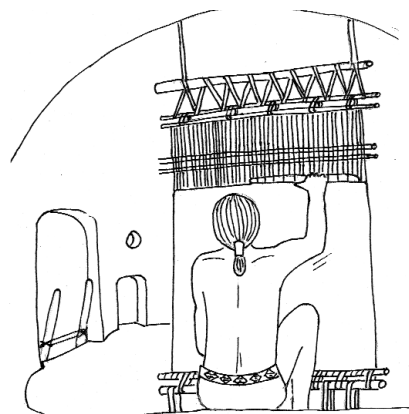
This ladder leads to four small cavates connected together. Somebody must have worked hard to make such a big home for their family! Can you see where the rooms used to be in front? Look for places where the people carved the cliff to make room walls. Look for a line of viga holes where the roof used to be. If you are waiting to go up the ladder, look up in the sky. Maybe you will see big black birds, called ravens, flying by. Are there any clouds to bring rain or snow so the corn will grow?

STAKE 15: CAVE KIVA

This is another kiva. Remember, kivas are special, sacred places. Everyone who enters should be quiet and respectful. Looms used to hang from the pieces of wood on the ceiling. The rows of small holes in the floor held the loom straight. Men wove cotton cloth here. Most of the people's clothes were made of this cloth.

You may see that some visitors have carved words or names on the walls. Would you want someone to write on the walls of your house or another place special to you?

Near the back wall is a larger hole in the floor. Archeologists call it a sipapu (SEE-pah-poo). That is a Hopi word. In Keres the word is sipah (see-PAH). Stories say the people came into this world from other worlds underground. The sipah helped them remember this story. The holes in the walls might be shelves to keep things off the floor. Do you see a hole by the door for the fire?



Weaver in cavate

Be very quiet and then have your teacher make a low-pitched sound. You will hear it rumble around the cave. Imagine sitting here at night. You are with your relatives, singing to ask for rain or good hunting. The kiva would make the song echo.

If you were a present-day Pueblo person and you saw someone making graffiti in a cave or a kiva, what would you say to them?

**STAKE 16: FREY TRAIL**

The Ancestral Pueblo people left here almost 500 years ago. Later other people lived in Frijoles Canyon. Spanish people farmed here. They gave it the name “Frijoles”. In 1909 a guest ranch was built just across the creek. In 1925, George and Evelyn Frey (FRY) moved here to run the lodge. For all those years there was no road down into the canyon. Everyone had to use this trail every time they had to go anywhere outside of the canyon on this side.

Traveling on foot would make trips hard and tiring. But we know that Ancestral Pueblo people traded with other groups. Some were as far away as Mexico and the coast of California. Traders traveled over vast distances. They traded pottery, obsidian, turquoise, food, and other things. People who lived in the canyon went up the trail too. Sometimes they were hunting or tending their gardens. They could look for wild plants to use for food, medicine, and tools. Maybe they went to visit friends in other villages.

Imagine living in this canyon in the old days. The steep trail was the only way out. It was snowy in winter and hot and dusty in the summer. When you got up to the top, there were no horses, cars or highways. You had to go everywhere on foot. Traders would see new places and meet different people. But they might be away from home for months.

What dangers do you think you would face if you went on a trip for trading? **no water no food, dangerous animals, unfriendly people, bad weather, getting lost, getting injured, etc.**

What would you miss if you were away from home for months?

STAKE 17: POTTERY

The Ancestral Pueblo people didn’t have faucets in their homes. They had to carry water from the stream. To carry the water, they made large clay pots. Nowadays we call these jars ollas (OY-yahs). Often the women carried the water jars on their heads. That way their hands were free. An olla is heavy even when it is empty. And if it held 2 gallons, the water would weigh 16 pounds – like carrying two big bottles of milk, of 18 cans of frozen juice! Carrying water would make you strong!

Pottery is made with clay from the ground. The people shaped it by hand and fired it outdoors. They made different sizes and shapes for different uses. If the museum is open, be sure to see the pottery on display. Some of the pieces are very old, and some are from Pueblo people now.

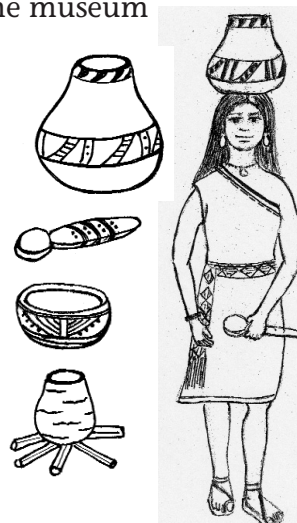
Draw a line to match these pots with how they were used:

A bowl to serve food
(bowls are low and wide)

An olla to carry water

A dipper to get a drink of water from the olla

A pot for cooking
(cooking pots are usually bumpy on the outside and don’t have painted designs)





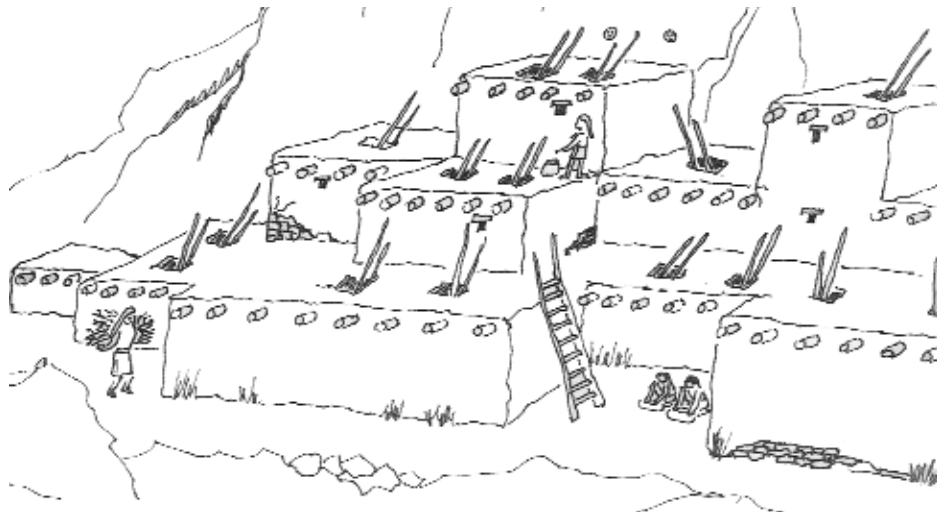
STAKE 18: FREYS' ORCHARD

The Freys moved into the canyon with their little son Richard in 1925. They used horses to carry 75 young fruit trees down here. They wanted to have an orchard to grow fruit to eat. In winter Mr. Frey cut ice from the creek. He stored it in sawdust in a building with thick walls so it wouldn't melt. Then in summer they used the ice and fresh fruit to make ice cream. Mrs. Frey had a vegetable garden. They raised chickens and had a milk cow. They grew the food for themselves and the visitors who stayed at the lodge. Mr. Frey moved away. Richard went into the Army. Mrs. Frey stayed. She lived in the canyon and worked here for 63 years. She died here in 1988 when she was 96. There is a book about her called "Lady of the Canyon".

If someone wrote a book about you, what would they call it?

STAKE 19: LONG HOUSE

Here the Ancestral Pueblo people built a row of houses connected to each other. There are houses along the cliff for 800 feet. You will be walking beside them all the way to Stake 21. That's a pretty long building ! So it is called Long House. You can see the holes where vigas attached to the cliff. You can tell that some of the houses were two or three stories high.



Did you notice that there aren't any doors to get into the houses? And no doors between rooms? It is the same in Tyuonyi and all the houses along the cliffs. The people went up a ladder to get onto the roof. Then they went down another ladder to get inside. Look far to your left above the line of viga holes. You can see that sometimes they stood on the roof and drew pictures on the cliff.

Lots of new words! Draw a viga, or an olla, or a cavate. Or maybe an olla in a cavate with a viga!



STAKE 20: PETROGLYPHS

Here you see more of the room walls. On the cliffs there are squares of plaster that were the back wall of someone's room. Look up above the house roofs. Do you see drawings carved into the stone? They are called petroglyphs (PET-row-gliffs). The longer you look, the more you will find. See if you can see birds, people, lightning, turkey tracks, and others. You probably wonder what the drawings on the cliffs mean. To really find out, you would have to ask the person who made them.

Mrs. Frey liked the petroglyphs of turkeys here. She changed them a little and put them on the curtains and dishes of her lodge. Now they are the symbol of the park. The rangers put them on many of the park signs.

If you lived here, what drawing would you make above your house? What does it mean to you? Draw it on this paper - not on the cliff! A thinking question: do you think it would be respectful or fair if someone nowadays made a new drawing at Long House? What is the difference between art and graffiti? (Hint - the people who lived at Long House wanted to have these drawings here. Graffiti is usually markings that are not welcome. Usually they even damage things.)

STAKE 21: A PICTOGRAPH

This is still part of Long House! How can you tell that there used to be homes here? Viga holes, cavates, and plaster are good clues. The red-and-white design was painted on the back wall of a room. The National Park Service covered it with glass to protect it from graffiti and weather.

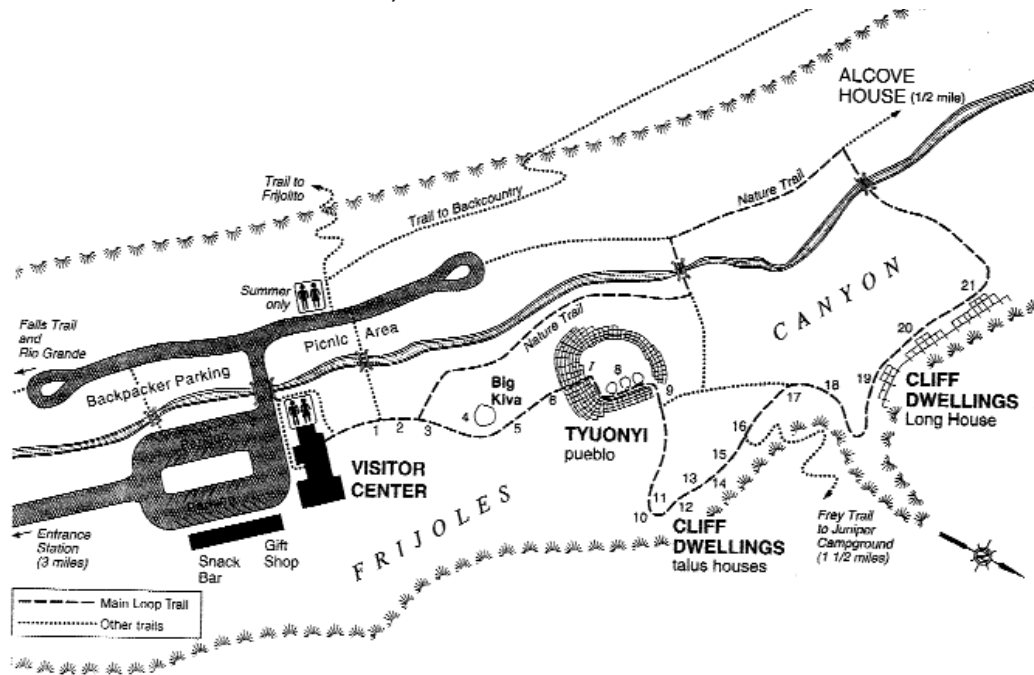
The Ancestral Pueblo people moved away from Frijoles Canyon in the 1500's. That is around 500 years ago. They left before the Spanish came here. We don't know exactly why they moved. Maybe they had used all the firewood out of the forest. Maybe the crops wouldn't grow very well anymore. Maybe it was a reason that archeologists haven't thought of yet. We know they made new homes not very far away. Many Pueblo people today say they are related to people who lived here. These pueblos include Cochiti, San Ildefonso, Santa Clara, San Felipe, Santo Domin

Meet the Ancestral Pueblo People

MAIN LOOP TRAIL, BANDELIER NATIONAL MONUMENT



FIELD TRIPS



FIRST STOP: Visitor Center Back Porch

INTRODUCTION *(if you did not have an orientation done by a ranger)*

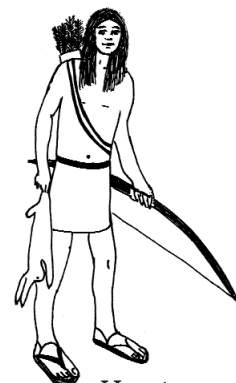
Get ready to go back in time 500 years.

It was a time when Indians were the only people anywhere in North or South America. At that time a group of people lived here in Frijoles Canyon. They were the ancestors of Pueblo Indians. In those days they had not yet seen anyone from Europe. They did not have metal, wheels, or horses. For a long time archeologists called them the Anasazi. Pueblo people today feel that name is offensive and disrespectful. So now we usually say Ancestral Pueblo instead.

Remember that Bandelier National Monument is a beautiful, fragile place. It belongs to everyone, including YOU! Thousands of people visit Bandelier every year. So it is very important for everyone to remember the rules. You need to take good care of the park and yourself. Be courteous to other visitors, too.

Don't forget:

- * stay on the trail
 - * stay with your leader
 - * talk quietly
 - * climb only on ladders
 - * leave the flowers for the wildlife
 - * do not litter
 - * don't drink from the creek
 - * do not feed or bother the animals
- AND
- * don't take rocks, pine cones, lizards or anything else home with you (except memories and photographs!)



Hunter



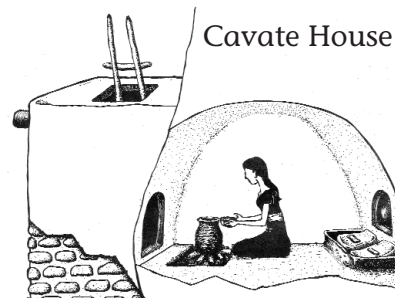
Making Pottery



ON THE TRAIL

STAKE 1: LIVING IN THE CANYON

Here you are, in Frijoles (Free-HOH-lays) Canyon. For hundreds of years it was home to a group of Ancestral Pueblo people. The cliffs around you are made of soft rock called tuff. That is volcanic ash. It erupted from a gigantic volcano in the Jemez Mountains about a million years ago. The holes were made by erosion from snow, rain, and wind. Ancestral Pueblo people used the loose rocks along the base of the cliffs. They shaped them into bricks to build their homes. They also carved small cave rooms into the soft rock of the cliffs. They are called cavates (cave-EIGHTS). The people used the cavates for back rooms in their homes. You can tell which holes are really cavates. They usually have clay plaster on the walls. They have black soot on the ceiling from smoky fires. They have flat floors and smooth walls. Farther down the trail you will see many of these cavates. You will also see a house that has been rebuilt.



As you walk along, imagine what it would be like to live here in those days. They were people just like us. They had sisters, brothers, and friends. They needed all the same things we need: food, clothes, homes, and even music.

What does a cavate have that natural holes in the cliff don't have?

What things would you and your friends like to do in those days?

STAKE 2: GETTING FOOD

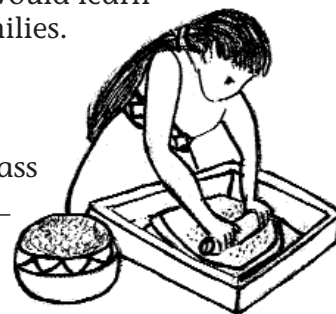
Imagine you were living here 500 years ago. There were houses along the base of the cliffs and in the bottom of the canyon. You would see gardens of corn, beans, and squash. Some were down here. Some were on top of the mesas. The only tame animals were dogs and turkeys. There weren't any horses, cows, sheep, chickens, or goats. If this was a sunny spring day, you probably would be helping in the garden. You could pull weeds. You could bring water from the creek to help your crops grow.



If this was a day in the fall, you would help with harvesting the crops. Then you would put them on the roof of your house to dry. You would store them carefully. That way you and your family would have food to eat all through the long, cold winter. Girls would grind corn into cornmeal to make nourishing meals. Boys would learn to be good hunters. They wanted to bring home meat for their families. The men taught them to be respectful to the animals they hunted. Everyone helped out and worked together.

Could they store their food in a refrigerator? How about cans or glass jars? _____

What could you do to keep from running out of food in the winter? _____





STAKE 3: USING NATIVE PLANTS

The canyon provided many things the people needed. There were stones for buildings and tools. There were areas to farm, a stream for water, and many kinds of native plants. Their ancestors had lived in the nearby canyons, mountains, and mesas for thousands of years. They had learned which plants they could use for food, medicines, dyes, and tools. They knew which ones were poisonous. They knew where to look and what time of year they would be growing.

Look around you. The tall trees with long needles and orange bark are *Ponderosa pines*. Their trunks made good roof beams.

Short bushy-looking trees are *junipers*. Their berries don't taste very good. But they could be used for food in dry years when other things didn't grow. Juniper wood was strong, so it was good for making tools.

Short pine trees with short needles are *pinyons*. Pinyon nuts are tasty and very nutritious. The wood is good for firewood.



Ponderosa Pine

Juniper Branch



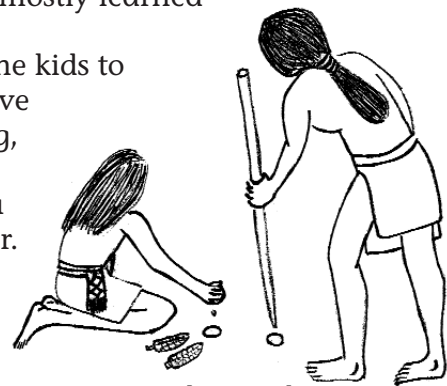
STAKE 4: BIG KIVA

(Remember to stay on the paved trail)

This is a very special room called a kiva (KEE-vah). It was a combination of church, school, and meeting room. Sometimes there were ceremonies. In the winter there was storytelling. Many Pueblo people today still use kivas. To get inside you walked across the flat mud roof and went down a wooden ladder. There could be a fire for light and heat. Fresh air came in through the ventilator shaft that looks like a chimney.

The rectangular holes in the floor might have been used as drums. Or maybe they were for storage. Kivas are used by both men and women. If you were a boy in those days, you would spend a lot of time here. You would learn from your father, grandfather, uncles, and other men of the village. Girls mostly learned at home from their mothers, grandmothers, and aunts. There were so many skills and so much knowledge for the kids to learn! But they didn't have an alphabet. They didn't have books to use in school. If you wanted to learn something, you had to get someone to teach you. There were no grades. If you didn't pay attention very well, maybe you wouldn't know how to make warm clothes for the winter. Or maybe your garden wouldn't grow enough food for your family.

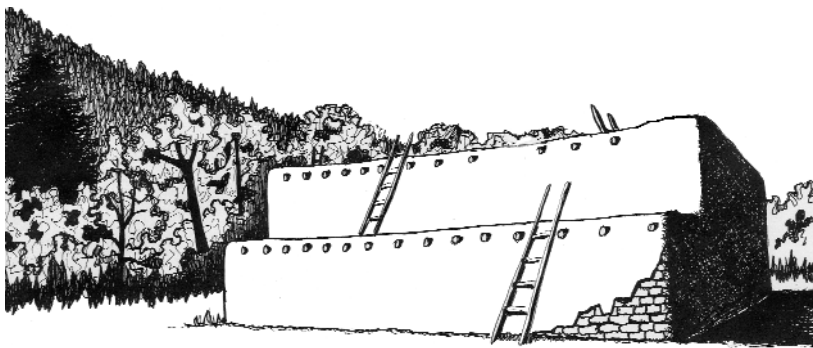
Name at least four skills you would want to learn to survive here in those days.



Father and Son
Planting Corn

**STAKE 5: AN UNEXCAVATED BUILDING**

Five hundred years ago, a building was standing here. The Ancestral Pueblo people moved away. Nobody was around to take care of it. The roof beams rotted and fell in. The rain and wind took away the mud mortar that held the building stones together. After awhile the walls fell down. Dirt blew in, and plants grew on top. Now you see a brush-covered mound, but it used to look like this:



The building that was at Stake 5

Archaeologists are scientists who study how people lived in the past. They can learn a lot by studying buildings like this. Sometimes they clear away the dirt to study the rooms and the things inside. That is called an

excavation. Archeologists do excavations very carefully. They don't want to miss even a tiny bit of information about the people's lives. This means that everyone must leave archeological sites undisturbed until scientists can study them. They were homes of ancestors of present-day Pueblo people. Leaving them undisturbed is a sign of respect to the Pueblos now and long ago.

There is a lot more to Bandelier National Monument than just Frijoles Canyon. In the park's 50 square miles there are at least 3000 archeological sites. Up ahead you will see a few that have been excavated. But the others look like this.

What are two things archeologists could learn about you if they studied your house?

STAKE 6: TYUONYI

This big village is named Tyuonyi (chew-OHN-ye). It has already been excavated. These are the real walls that the Ancestral Pueblo people built. When they were living here, all the walls were tall. The rooms had roofs. Some houses had two stories. Each family would build as many rooms as they needed for sleeping, cooking, and storage. The very small rooms might be used for storing food. Many families would live in the village. Others had their homes up along the cliffs. Some archeologists think that 300 or 400 people might have lived in Frijoles Canyon.

Now the roofs are gone. Rain can wash the mud away. The walls can fall down. The National Park Service has to work hard to keep the walls up. To present-day Pueblo people, this is a very special place. Their ancestors lived here. Please remember to show your respect for the Pueblo people and their ancestors. Stay on the trail. Don't lean or sit on the walls. You wouldn't want to do anything that might cause damage.

So many families lived so close together. Everybody really had to get along.

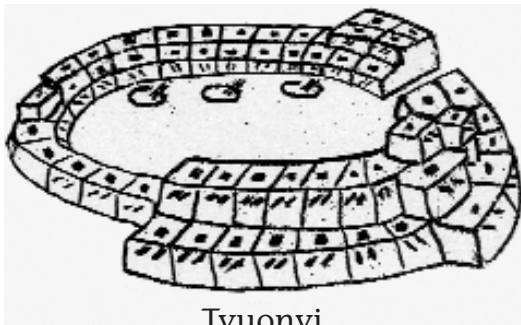
Think of two rules to keep you and your neighbors from arguing too much.

**STAKE 7: TYUONYI PLAZA**

(You're not off the trail or sitting on the walls, right?) The big open space in the middle of the village is the plaza. It was an area for work, play, and ceremonial dances for everyone. Here men might be making arrows or repairing tools. Women might be grinding corn or cooking. You and your friends could play with the dogs or babysit your little brothers and sisters. You could help with the chores. The big color drawing in the park brochure shows what it might have looked like in those days. Tyuonyi is very unusual. Most villages were shaped like a rectangle or square and built on mesa tops.

What would be your favorite thing about living in a village like this?

Would there be anything you wouldn't like?



Tyuonyi

STAKE 8: THREE KIVAS

There are many kivas in Frijoles Canyon. Most of them are small like the excavated one in the plaza. Can you see two round low spots in the plaza? They are kivas that haven't been dug up yet.

Archaeologists wonder why the Big Kiva (that you saw at Stake 4) was so big. Maybe it was for special meetings or ceremonies with more people than could fit into a regular kiva.

STAKE 9: PEOPLE ALL AROUND

From here you can see the big village and all the homes along the cliffs. Imagine being an eagle in the old days. Imagine flying over this village. Then fly east, west, and south of here. You would see other big villages every few miles. There would be lots of small buildings and gardens in between. North of here you would fly over the top of the volcano. Nobody lived up there because it is the top of a mountain. It is too cold and snowy in the winter.

The people here and the ones to the west and south spoke a language called Keres (CARE-aze). People to the east spoke a different language, Tewa (TAY-wah). But they probably did a lot of visiting and trading from village to village. Some Pueblo people in New Mexico still speak those languages today. Others speak Tiwa (TEE-wah), Towa (TOE-wah), or Zuni (ZOO-nee).



Where would you like to live—on a canyon bottom ? along the base of the cliffs ? on a mesa top? Why?

**STAKE 10: CAVE AND TUFF**

There is a natural cave high in the cliff above you. Do you remember how to tell whether people used this cave? (the shape, plaster, and soot on the ceiling) Did they? There are hand and toe holds on the cliff. The people used them for climbing up to the cave. They were worn deep into the rock by many years of use.

Here you are right next to the tuff. It is rock that came from the volcano. Even without touching it, you can tell that it is soft. It is not black and hard like the kind of lava called basalt (buh-SALT). That lava is found around many other volcanoes. You can see why there are rules that everyone must walk just on the trail. No one should climb around on the rocks or cliffs. You could do a lot of damage. Or you could get hurt on such crumbly stuff. You can see how the people could carve out a cavate using stone tools. It would be hard, dusty work to make a cavate and build a house. But then you would have a warm, cozy place to live with your family.

STAKE 11: ENTER A CAVATE

You're welcome to use the ladder to enter this cavate. Remember to only go into caves that have ladders. There used to be a house in front of this cavate. To make the roof strong, the people put the ends of the roof beams into holes in the cliff. We call roof beams vigas (VEE-gahs). Here you can see a line of holes for vigas. Some houses had a second story. Then the roof of the first story was the floor for the second story.

While you are waiting to go up the ladder, look at Tyuonyi. People who lived there were close to the stream and the gardens. If you lived up here by the cliffs you had a different advantage. In winter the sun shines warmly on this south-facing canyon wall. The snow melts off quickly. In the afternoon you could sit in the sun on your house roof. You could enjoy the warmth before the long cold dark winter night.

Make a drawing of all the rooms you think this building had. Put labels showing what you think each room was used for. If it was your house, what would you use the cavate for?

STAKE 12: RECONSTRUCTED HOME

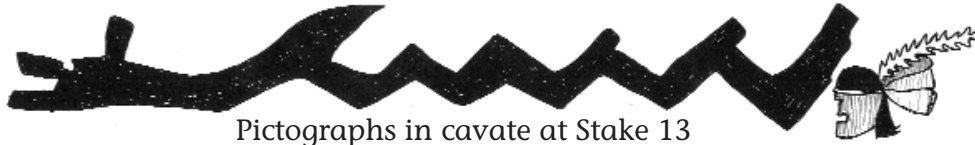
This house was rebuilt by the Park Service. All the houses along the cliffs looked like this, except in real houses the only door was in the roof. The houses in Tyuonyi looked a lot like this too. But they didn't have the cliff for a back wall. Cavates were seldom used by themselves. They were almost always a back room for a house.

The thick stone walls provided good insulation. On a hot summer day your house would be cool. On a cold winter day you could heat it with just a small fire. Imagine going out on a snowy day. You would use a stone ax to cut firewood. Remember, they didn't have any metal. Then you would carry the wood home on your back. Remember, they didn't have horses or wheels.

Would you like to have a house that was small but easy to heat? Or a bigger one that took a lot more firewood? Why?



Ancestral Pueblo woman and child using a one-log ladder



Pictographs in cavate at Stake 13

STAKE 13: SNAKE KIVA

This cavate was a kiva. The people coated the walls with clay plaster. Then they painted designs on the plaster. Painted designs are called pictographs. On the back wall there is a wide, long, wavy black line. Many people think it is a drawing of a feathered serpent. If you look closely, you will notice the head on the left end. It has its mouth open. There is a straight line, a feather, sticking up. To the right, where the back bumps up, is another feather. This one curves toward the tail. Some Pueblo people today call this serpent Awanyu (uh-WAHN-yew). They say it is a spirit of water, like rain and streams. Water has always been very important to people trying to survive in New Mexico.

Look for a red-brown picture near the serpent's tail. Can you see a face with black hair? Can you see three feathers on the back of the head? They are red, white, and yellow.

STAKE 14: ANOTHER LADDER

This ladder leads to four small cavates connected together. Somebody must have worked hard to make such a big home for their family! Can you see where the rooms used to be in front? Look for places where the people carved the cliff to make room walls. Look for a line of viga holes where the roof used to be. If you are waiting to go up the ladder, look up in the sky. Maybe you will see big black birds, called ravens, flying by. Are there any clouds to bring rain or snow so the corn will grow?

STAKE 15: CAVE KIVA

This is another kiva. Remember, kivas are special, sacred places. Everyone who enters should be quiet and respectful. Looms used to hang from the pieces of wood on the ceiling. The rows of small holes in the floor held the loom straight. Men wove cotton cloth here. Most of the people's clothes were made of this cloth.

You may see that some visitors have carved words or names on the walls. Would you want someone to write on the walls of your house or another place special to you?

Near the back wall is a larger hole in the floor. Archeologists call it a sipapu (SEE-pah-poo). That is a Hopi word. In Keres the word is sipah (see-PAH). Stories say the people came into this world from other worlds underground. The sipah helped them remember this story. The holes in the walls might be shelves to keep things off the floor. Do you see a hole by the door for the fire?

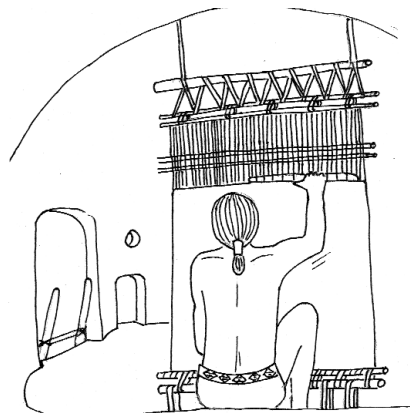
Be very quiet and then have your teacher make a low-pitched sound. You will hear it rumble around the cave. Imagine sitting here at night. You are with your relatives, singing to ask for rain or good hunting. The kiva would make the song echo.

If you were a present-day Pueblo person and you saw someone making graffiti in a cave or a kiva, what would you say to them?



STAKE 16: FREY TRAIL

The Ancestral Pueblo people left here almost 500 years ago. Later other people lived in Frijoles Canyon. Spanish people farmed here. They gave it the name “Frijoles”. In 1909 a guest ranch was built just across the creek. In 1925, George and Evelyn Frey (FRY) moved here to run the lodge. For all those years there was no road down into the canyon. Everyone had to use this trail every time they had to go anywhere outside of the canyon on this side.



Weaver in cavate

Traveling on foot would make trips hard and tiring. But we know that Ancestral Pueblo people traded with other groups. Some were as far away as Mexico and the coast of California. Traders traveled over vast distances. They traded pottery, obsidian, turquoise, food, and other things. People who lived in the canyon went up the trail too. Sometimes they were hunting or tending their gardens. They could look for wild plants to use for food, medicine, and tools. Maybe they went to visit friends in other villages.

Imagine living in this canyon in the old days. The steep trail was the only way out. It was snowy in winter and hot and dusty in the summer. When you got up to the top, there were no horses, cars or highways. You had to go everywhere on foot. Traders would see new places and meet different people. But they might be away from home for months.

What dangers do you think you would face if you went on a trip for trading?

What would you miss if you were away from home for months?

STAKE 17: POTTERY

The Ancestral Pueblo people didn’t have faucets in their homes. They had to carry water from the stream. To carry the water, they made large clay pots. Nowadays we call these jars ollas (OY-yahs). Often the women carried the water jars on their heads. That way their hands were free. An olla is heavy even when it is empty. And if it held 2 gallons, the water would weigh 16 pounds – like carrying two big bottles of milk, or 18 cans of frozen juice! Carrying water would make you strong!

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Draw a line to match these pots with how they were used:

A bowl to serve food (bowls are low and wide)

An olla to carry water

A dipper to get a drink of water from the olla

A pot for cooking (cooking pots are usually bumpy on the outside and don’t have painted designs)

